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(54) Title: A POLYMER DISPERSION COMPRISING PARTICLES OF POLYURETHANE AND A COPOLYMER OR TERPOLYMER PRODUCED BY EMULSION POLYMERISATION OF OLEFINICALLY UNSATURATED MONOMERS

(57) Abstract: A polymer dispersion comprising an aqueous, continuous phase and dispersed particles of polyurethane, which is based on organic, non-aromatic isocyanates with a functionality of at least 2, said polyurethane having a high degree of crystallinity and whose crystalline phase has a melting point between 25 and 70 °C, and a copolymer and/or terpolymer having a T_g (glass transition temperature) between -20 and +50 °C obtainable by emulsion polymerization of ethylenically unsaturated monomeric materials containing only C, H, O and/or N atoms, which monomeric materials comprise from 0.5 to 15 percent on the total of monomeric materials of monomers containing at least one nitrile group, in a weight ratio between 50:50 and 10:90 (polyurethane to emulsion polymer), in which the particles of the dispersion are in the form of multiphase particles comprising said polyurethane and said copolymer and/or terpolymer and which dispersion is obtainable by emulsion polymerisation of the monomeric materials in the presence of the polyurethane dispersion, said eventual polymer dispersion having a solids content of 30 to 70 %. The invention also comprises the use of these dispersions as an adhesive, especially for heat seal laminating, preferably for 3-D(imensional) Laminating. The dispersion is also useful as a size for glass fibres.

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